CLAIMS:

1. A method for prevention of infection of a patient by an infecting agent comprising reactivating the patient's thymus.

2. The method of claim 1 wherein the patient's thymus has been at least in part deactivated.

3. The method of claim 2 wherein the patient is post-pubertal.

4. The method of claim 2 wherein the patient has or had a disease or treatment of a disease that at least in part deactivated the patient's thymus.

5. The method of claim 1 wherein the reactivation is induced prior to or right after the patient is initially exposed to the infecting agent.

6. The method of claim 1 wherein reactivating the patient's thymus is accomplished through disruption of sex steroid mediated signaling to the thymus.

7. The method of claim 6 wherein the method of disrupting the sex steroid mediated signaling to the thymus is through administration of one or more pharmaceuticals that lower the concentration of sex steroids in a patient.

8. The method of claim 7 wherein the pharmaceuticals are selected from the group consisting of LHRH analogs, anti-LHRH vaccines, and combinations thereof.

9. The method of claim 8 wherein the LHRH analog is an LHRH agonist or an LHRH antagonist.

10. The method of claim 9 wherein the LHRH agonist is selected from the group consisting of Buserelin, Cystorelin, Decapeptyl, Deslorelin, Gonadorelin, Goserelin, Histrelin, Leuprolide, Leuprorelin, Lutrelin, Meterelin, Nafarelin and Triptorelin.

11. The method of claim 9 wherein the LHRH antagonist is selected from the group consisting of Eulexin and Abarelix.

12. The method of claim 6 wherein the method of disrupting the sex steroid mediated signaling to the thymus is through surgical castration of the patient.

13. The method of claim 7 having the further step of delivering at least one cytokine, at least one growth factor, or a combination of at least one cytokine and at least one growth factor to the patient.

14. The method of claim 13 wherein the cytokine is selected from the group consisting of Interleukin 2 (IL2), Interleukin 7 (IL7) and Interleukin 15 (IL15) and combinations thereof.

15. The method of claim 13 wherein the growth factor is selected from the group consisting of members of the epithelial growth factor family, members of the fibroblast growth factor family, Stem Cell Factor, granulocyte colony stimulating factor (GCSF), keratinocyte growth factor (KGF), and combinations thereof.

16. The method of claim 13 wherein the cytokine and/or growth factor is delivered prior to delivery of the LHRH analog, the anti-LHRH vaccine, or the combination thereof.

17. The method of claim 13 wherein the cytokine and/or growth factor is delivered during or after delivery of the LHRH analog, the anti-LHRH vaccine, or the combination thereof.

18. The method of claim 6 further comprising the step of delivering to the patient cells selected from the group consisting of HSC, myeloid progenitor cells, lymphoid progenitor cells and epithelial stem cells.

19. The method of claim 18 wherein the cells are delivered to the patient between about one and three weeks after disruption of sex steroid mediated signaling to the thymus.

20. The method of claim 18 wherein the cells are delivered at the time the thymus begins to be reactivated.

21. The method of claim 18 wherein the cells are genetically modified.

22. The method of claim 21 wherein the genetic modification creates resistance in the cells and their progeny to infection by an external agent.

23. The method of claim 22 wherein the external agent is a virus.

24. The method of claim 23 wherein the virus is selected from the group consisting of HIV, flu virus, hepatitis A virus, hepatitis B virus and hepatitis C virus.

30. A method for enhancing bone marrow productivity in a patient comprising the step of administering an LHRH analog to the patient.